

REMARKS

Applicants thank the Examiner for consideration of the present application. The Office Action dated November 13, 2008 has been carefully reviewed. Claims 1-47 are pending in this application. Claims 10-33 and 35-47 have been previously withdrawn from consideration. Each of the pending, non-withdrawn claims 1-9 and 34 stands rejected in the 11/13/2008 Office Action. Reconsideration of each of the rejected claims in light of the remarks presented herein is respectfully requested.

SPECIFICATION OBJECTIONS

In the 11/13/2008 Office Action, the Examiner noted the use of the trademark “Delrin” in the specification and requested that this term be capitalized and accompanied by generic terminology. Applicants have amended the specification herein to identify the term “Delrin” as a trademark, identify the source of “Delrin,” and provide generic terminology (i.e., “polymeric material”) in those section wherein one was not previously provided. Applicants believe that such amendments traverse any objections the Examiner may have regarding the use of the term “Delrin.”

The Examiner also objected to the specification for failing to provide proper antecedent basis for the term “metal die block” of claim 3. Applicants have amended the specification herein to state that, in the illustrative embodiment, “each of the die blocks 20, 22 . . . is formed from metal, but may be formed from another material in other embodiments.” This amendment is fully supported by the originally filed claim 3. Applicants note that “claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter.”

MPEP § 2163.06 III citing *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985) claimed subject matter of claim 3.

35 U.S.C. § 112 REJECTION

Claim 3 was rejected in the 11/13/2008 Office Action as being indefinite. In particular, the Examiner found the recitation of “wherein the urging step comprises urging a metal die block” to be indefinite as unclear whether claim 3 added the element of “metal” to the die block of claim 1 or whether the claim 3 requires a second, metal die block. Applicants note that claim 3 depends from claim 1 and uses the transitional phrase “comprising” to further define the claim element “urging a die block” to an embodiment wherein the die block is a metal die block. Claim 3 does not necessarily require a second die block. Although Applicants believe claim 3 is definite as written, Applicants have amended claim 3 to recite “wherein urging the die block toward a stationary phase supported on the sample plate comprises urging a metal die block toward the stationary phase supported on the sample plate.” Applicants believe that this amendment clearly defines the scope of claim 3.

35 U.S.C. § 102 REJECTIONS

Each of claims 1-9 and 34 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Nurok I (U.S. Patent 6,303,029). Additionally, each of claims 1-9 and 34 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Nurok II (U.S. Patent 7,279,105). Further, each of claims 1-2, 5-6, 8, and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mincsovics (WO 01/50123).

The requirements for a reference to anticipate under 35 U.S.C. § 102 are quite clear. MPEP § 2131 provides that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art

reference.” *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The Federal Circuit has held that “unless a reference discloses within the four corners of the document not only *all* of the limitations claimed but also *all of the limitations arranged or combined in the same way as recited in the claim*, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.” *Net MoneyIN v. Verisign*, 545 F.3d 1359, 88 USPQ2d 1751, 1759 (Fed. Cir. 2008) (emphasis added). As discussed in more detail below, none of the cited references Nurok I, Nurok II, or Mincsovics meet the standard for anticipation.

Discussion: Independent Claim 1 – Nurok I and Nurok II

The Examiner rejected independent claim 1 as being anticipated by Nurok I and Nurok II. Applicants note that Nurok II has a disclosure similar to Nurok I, and the Examiner has rejected claim 1 based on similar elements from Nurok I and Nurok II. As such, Applicants’ arguments set-forth below are equally applicable to the 35 U.S.C. § 102(b) rejection over Nurok I and the 35 U.S.C. § 102(e) over Nurok III.

In rejecting claim 1 based on Nurok I and Nurok II, the Examiner asserts that each reference discloses “urging a die block toward a stationary phase supported on a sample plate (C13/L 12-39, die block 94, stationary phase 16, sample plate 12) so as to exert a pressure which is greater than atmospheric pressure against the stationary phase (C13/L 12-39).” However, the Examiner has mischaracterized these references. The second member 94 of Nurok I and Nurok II is stationary after being coupled to first member 92 and, as such, cannot properly be said to be “urged” as recited in claim 1. Further, the second member 94 does not exert a pressure “greater than atmospheric pressure against the stationary phase” while being coupled to the first member

92. Rather, when the second member 94 is coupled to the first member 92, the members define the sealed cavity 100 in which the chromatographic bed 16 is positioned:

Once plate 12 is positioned within seat area 96, and membrane 144 is placed into contact with chromatographic bed 16, second member 94 is positioned relative to first member 92 so that the holes 102 defined in both members are aligned. A fastener 108 is then inserted through each hole 108 and a nut 110 is meshingly engaged with each fastener 108. Positioning and securing second member 94 to first member 92 in the above described manner results in (i) sealed cavity 100 being defined between first member 92 and second member 94, (ii) gasket 112 being positioned in contact with membrane 144 and located over sealant 148, and (iii) a portion 166 of chromatographic bed 16 being located within sealed cavity 100.

Nurok I (Col.12, ll. 16-28). The pressure within the sealed cavity 100 is, conversely, elevated to a level greater than atmosphere pressure via fluid 168:

Once plate 12 begins to develop, pump 122 is actuated so that a fluid 168 is advanced under pressure into sealed cavity 100 in the directions indicated by arrows 140 (see FIG. 4). Note that (i) baffles 124 attached to an inside wall of sealed cavity 100 cause fluid 168 to travel through sealed cavity in a serpentine fashion and (ii) membrane 144 prevents fluid 168 from coming into contact with chromatographic bed 16. It should be understood that fluid 168 is advanced into sealed cavity 100 so that the pressure within sealed cavity 100 is greater than the pressure outside of sealed cavity 100. For example, pressure within sealed cavity 100 can be in the range of about 3 to 50 atmospheres. Placing sealed cavity 100 under the aforementioned pressure also subjects the portion 166 of the chromatographic bed 16 located within sealed cavity 100 under the same pressure. Having portion 166 of the chromatographic bed 16 under pressure during the development of plate 12 is an important aspect of the present invention since it substantially enhances the separation efficiency of arrangement 88. Furthermore, advancing fluid 168 into sealed cavity 100 under pressure places fluid 168 and plate 12 in a heat exchange relationship with chromatographic bed 16 such that temperature control unit 128, in cooperation with cooling unit 132, can maintain the temperature of plate 12 within a predetermined range. In particular, maintaining plate 12 within a predetermined temperature range prevents ohmic over heating of plate 12 which can reduce the separation efficiency of arrangement 88.

Nurok I (Col. 13, ll. 12-39). It appears the Examiner is attempting to partition the “urging step” of claim 1 into two separate elements – the first being a recitation of the die block and the second being a recitation of exerting a pressure greater than atmospheric pressure against the stationary phase. Such a construction is improper because all of the elements must be arranged or combined in the same way as recited in the claim. See *Net MoneyIN v. Verisign, supra*. Claim 1 recites a step of “urging a die block toward a stationary phase supported on a sample plate so as

to exert a pressure which is greater than atmospheric pressure against the stationary phase.” The Examiner has failed to identify any section of Nurok I or Nurok II in which such an element is disclosed and, as such, the Examiner has failed to establish a *prima facie* case of anticipation. Accordingly, claim 1 is believed to be in condition for allowance as such action is respectfully requested.

Discussion: Independent Claim 1 – Mincsovics

The Examiner rejected independent claim 1 as being anticipated by Mincsovics. In support of this rejection, the Examiner asserts that Mincsovics discloses “urging a die block toward a stationary phase supported on a sample plate (Figure 2, [0047], die block 8, stationary phase 2, sample plate 3).” Applicants respectfully traverse this rejection because Mincsovics fails to disclose each and every element of independent claim 1. That is, contrary to the 11/13/2008 Office Action, Mincsovics fails to disclose, at least, “urging a die block toward a stationary phase.” Rather, Mincsovics discloses moving a sample plate “support 3” into a “flexible film 8.” A flexible film is not a die block as understood by one of ordinary skill in the art, and the flexible film 8 of Mincsovics is stationary (i.e., cannot be urged).

The Examiner’s construction of “die block” is unreasonably broad. Under U.S. law, the Examiner cannot adopt a claim interpretation contrary to the language of the claims and the interpretative guidance afforded by the Appellants’ specification. When determining the scope of the claims in patent applications, the Patent and Trademark Office is required to give the words of a claim “their ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005). The ordinary and customary meaning is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Id. at 1326. Rather than focusing on the words of the claim itself, the

PTO must also give the “claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art.” *Id.* at 1329 (internal citation omitted). The *Phillips* court emphasized:

It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. *Such a person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field.* The inventor’s words that are used to describe the invention—the inventor’s lexicography—must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology.

Id. at 1326 (quoting *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998)) (emphasis added). While the Examiner must interpret the claims broadly in view of the specification, Federal Circuit precedent suggests the Examiner cannot adopt an expansive construction of the claims running counter to the understanding and interpretation of one ordinary skill in the field of the invention. Yet that is precisely what the Examiner has done in this case.

The Examiner’s cites the flexible film 8 of Mincsovics as a “die block.” However, even under the broadest reasonable interpretation standard, a flexible film cannot properly be considered a “die block.” One of ordinary skill in the art simply would not consider the flexible film 8 of Mincsovics to be a “die block” as claimed. Neither the specification of the present application nor its common usage in the art would lead one skilled in the art to believe that a flexible film is synonymous with the term “die block.” The Examiner’s interpretation ignores the guidance afforded by the specification and runs counter to the understanding of one skilled in the art. As such, the Examiner’s construction is unreasonable and cannot support this rejection of claim 1.

Further, Mincsovics illustrates and discloses that the flexible film 8 is stationary, not “urged” as recited in claim 1. Rather, the sample support 3 of Mincsovics is moved into the flexible film 8:

When the pressurization fluid flows, it exerts substantially vertical external pressure on the bottom race of the support 3, thereby raising it and consequently pressing the film 8 and the stationary phase 32 against each other with pressure of selected magnitude.”

Mincsovics, Par. 0048, see also FIG.2. As such, even if the flexible film 8 could be properly interpreted as a “die block” (an assertion with which the Applicants disagree), the flexible film 8 is not urged “toward a stationary phase,” as recited. Rather, the flexible film 8 is held in place within slots formed in the sidewalls of the bottom portion 4 of the chamber 1 as clearly illustrated in FIG. 2 of Mincsovics. As such, Mincsovics fails to disclose at least this element of claim 1.

For all the reasons set-forth above, Mincsovics fails to disclose each and every element of claim 1. Accordingly, for at least this reason, claim 1 is believed to be in condition for allowance and such action is respectfully requested.

Discussion Re: Claims 2-9 and 34

Each of claims 2-9 and 34 include claim 1 as a base claim. As such, the rejection of claims 2-9 and 34 should be withdrawn for the reasons hereinbefore discussed with regard to claim 1. In light of the reasons for withdrawal of the rejection of claim 1, any arguments specific to claims 2-9 and 34 are held in abeyance without prejudice or admission to any assertion made by the Examiner in order to expedite prosecution.

DOUBLE PATENTING REJECTIONS

Each of claims 1, 2, 5, and 6 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8, and 10-12 of Nurok II in view of Hatch (U.S. Patent 6,001,260). Applicants respectfully traverse this rejection as improper because the Examiner has failed to establish a proper *prima facie* case of obviousness.

As set-forth in MPEP § 804, the analysis employed in determining an obviousness-type double patenting rejection is guided by the principles of a 35 U.S.C. § 103 obviousness determination. In regard to a determination of § 103 obviousness, MPEP § 2143 requires the Examiner to support a *prima facie* case of obviousness with a “clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit” (citing *KSR v. Teleflex*, 82 USPQ 2d 1385, 1395-97 (2007)). *KSR* also reaffirmed that “rejections on obviousness grounds cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR*, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Yet the Examiner’s analysis of obviousness in regard to Nurok II and Hatch does not provide the reasoned, articulated analysis required by *KSR*. In the 11/13/2008 Office Action, the Examiner states that

It would have been obvious to one having ordinary skill in the art at the time of the invention to use die blocks and a hydraulic ram to exert pressure on the stationary phase recited in claims 1, 8, and 10-12 of US patent No. 7,279,105, as taught by hatch et al., since doing so provides an easily adaptable compression element.

Such a proposed motivation, i.e., to “provide an easily adaptable compression element,” is simply conclusory and lacks any analysis. For example, the Examiner has failed to provide any analysis as to why one of ordinary skill in the art would be motivated to modify Nurok II in the manner proposed by the Examiner so as to provide “an easily adaptable

compression element” when Nurok II already includes a “compression element” in the form of the fluid 168. The Examiner has not pointed to any section of Nurok II, Hatch, or any other reference of record upon which to base the Examiner’s conclusory reasoning of motivation. Because the Examiner has not engaged in an explicit, reasoned analysis to illustrate why one of ordinary skill in the art would be motivated to arrive at the proposed modification, the Examiner has failed to establish a *prima facie* case of obviousness. Accordingly, claims 1, 2, 5, and 6 are believed to be in condition for allowance and such action is respectfully requested.

CONCLUSION

In view of the foregoing, it is submitted that this application is in a condition for allowance. Action to that end is hereby solicited. If there are any questions or comments that would speed prosecution of this application, the Examiner is invited to call the undersigned at (317) 261-7959.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response. The Commissioner is hereby authorized to charge the fee for such Petition and any shortage of fees,

and credit any overpayment of fees, to the Account of Barnes & Thornburg, Deposit Account No. 10-0435 with reference to file 29920-79201.

Respectfully submitted,

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